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04/06/00
JC781 U.S. PTO

JC715 U.S. PTO
09/544718
04/06/00

Patent
Attorney's Docket No. P2513\561

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**UTILITY PATENT
APPLICATION TRANSMITTAL LETTER**

Box PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Enclosed for filing is the utility patent application of Eduardo Cue, Shaun Hilton, Glenn D. Epis, Judy D. Halchin, Susan Pfandt and Cathy Ridenour for VIRTUAL BUNDLES.

Also enclosed are:

- ☒ 10 sheet(s) of ☐ formal ☒ informal drawing(s);
- ☐ a claim for foreign priority under 35 U.S.C. §§ 119 and/or 365 is ☐ hereby made to ☐ filed in ☐ on ☐;
- ☐ in the declaration;
- ☐ a certified copy of the priority document;
- ☐ a General Authorization for Petitions for Extensions of Time and Payment of Fees;
- ☐ ☐ statement(s) claiming small entity status;
- ☐ an Assignment document;
- ☐ an Information Disclosure Statement; and
- ☐ Other: ☐



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☒ An ☒ executed ☐ unexecuted declaration of the inventor(s)
☒ also is enclosed ☐ will follow.

☐ Please amend the specification by inserting before the first line the sentence --This application claims priority under 35 U.S.C. §§119 and/or 365 to _ filed in _ on _; the entire content of which is hereby incorporated by reference.--

☐ A bibliographic data entry sheet is enclosed.

☒ The filing fee has been calculated as follows ☐ and in accordance with the enclosed preliminary amendment:

C L A I M S					
	NO. OF CLAIMS		EXTRA CLAIMS	RATE	FEE
Basic Application Fee					\$690.00 (101)
Total Claims	47	MINUS 20 =	17	x \$18.00 (103)	306.00
Independent Claims	4	MINUS 3 =	1	x \$78.00 (102)	78
If multiple dependent claims are presented, add \$260.00 (104)					
Total Application Fee					1,074.00
If verified Statement claiming small entity status is enclosed, subtract 50% of Total Application Fee					
Add Assignment Recording Fee \$40.00 (581) if Assignment document is enclosed					
TOTAL APPLICATION FEE DUE					1,074.00

☐ This application is being filed without a filing fee. Issuance of a Notice to File Missing Parts of Application is respectfully requested.

☒ A check in the amount of \$ 1,074.00 is enclosed for the fee due.

☐ Charge \$ _____ to Deposit Account No. 02-4800 for the fee due.

☒ The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

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PATENT

Atty Dkt. No. 001580-561

Client Ref. No. P2513

VIRTUAL BUNDLES

Background of the Invention

Field of the Invention

The present invention relates to electronic commerce sites.

5 State of the Art

In recent years, the Internet has exploded in popularity. In particular, electronic commerce sites using the Internet have become a popular way for consumers to obtain products from vendors. Typically, the consumer uses a web browser at their computer to connect to a web site of a vendor across the Internet.

10 Electronic commerce sites usually are produced using servers. The servers include a web server, which produces the web pages, and an application server, which runs applications for the operation of the electronic commerce site. The web server can communicate with the application server using a protocol such as the Common Gateway Interface (CGI).

15 In some sites, it makes sense to bundle together a number of products and make the bundle available for purchase by a consumer. For example, computer

vendor sites typically offer bundled computer systems. Unfortunately, the bundles selected by the vendor are not always the best solution for every consumer group. Different groups have different needs that can not always be anticipated by the vendor.

- 5 It is desired to have an improved system of providing bundles of products for purchase by a consumer at a web site.

Summary of the Present Invention

10 The present invention relates to an electronic commerce system in which an external administrator can bundle together a number of products offered by a vendor via electronic commerce to produce a virtual bundle. The virtual bundle of products can then be offered for sale at an electronic commerce site by a vendor. Since the virtual bundle of products is selected by an external administrator, the virtual bundle of products will be better suited to the customers' needs.

15 One embodiment of the present invention is a system including a server system adapted to allow the production of virtual bundle of products to be sold in an electronic commerce site of a vendor. The products to be bundled are selected from a number of selectable products. The virtual bundle is suitable for purchase by a member of a group other than the vendor. The system also includes an external group administrator computer. The external computer is operably
20 connectable to the server system, wherein the external computer is adapted to provide bundle selection data from the person to the server system. The server system is adapted to use the bundle selection data to produce the virtual bundle.

25 Another embodiment of the present invention comprises a computer-readable medium containing a program that executes a procedure. The procedure includes storing the virtual bundle data in a database as a result of virtual bundle data sent from an external computer. The procedure also includes providing a virtual bundle of products to be sold at the electronic commerce site of a vendor. The products to be bundled being selected from a number of selectable products.

The virtual bundle is suitable for purchase by a member of the group other than the vendor. The providing step uses the virtual bundle data stored in the database.

Yet another embodiment of the present invention comprises an apparatus including means for receiving virtual bundle data sent from an external computer and for storing the virtual bundle in a database. The apparatus also includes means for providing a virtual bundle of products to be sold at an electronic commerce site of a vendor. The products to be bundled are selected from a number of selectable products. The virtual bundle is suitable for purchase by a member of the group other than the vendor. The providing means uses the virtual bundle data stored in the database to produce a virtual bundle of products.

Brief Description of the Drawings

Figs. 1A and 1B are diagrams that illustrate an overview of a server system which can be used in one embodiment of the present invention.

Fig. 2 is a diagram that illustrates the construction of virtual bundles in one embodiment of present invention.

Fig. 3 is a diagram of an administration web site that allows the creation of a virtual bundle of products.

Fig. 4 and Fig. 5 are diagrams that illustrate a custom web store that offers the virtual bundles of products to members of a group.

Figs. 6A and 6B are diagrams that illustrate the dynamic construction of the price of the virtual bundles offered for sale at a custom store application.

Fig. 7 is a diagram that illustrates the data structure for one embodiment of the present invention.

Fig. 8 is a diagram that illustrates a security system for one embodiment of the custom store system used with the present invention.

Detailed Description of the Preferred Embodiment

Fig. 1A is a diagram that illustrates one embodiment of the present invention. The server system 20 includes a web server 22, an application server 24, and a database 26. Web server 22 is preferably isolated from application server 24 using a firewall. Customer computers, such as customer computer 30, use a browser to access an electronic commerce site produced by the server system 20. The browser sends a URL (Uniform Resource Locator) to the web server which uses the application server 24 to create a web site which is provided to the customer computer 30. An interface protocol, such as the Common Gateway Interface is used in the interaction of the web server 22 and the application server 24. Application server 24 uses an electronic commerce application to create the web pages. The electronic commerce site is created using data from a database, such as database 26.

In the present invention, an external computer, such as the virtual bundle selection computer 28, is used to access the server system 20. Once the server system 20 has obtained authorization information from the user of the external computer 28, the virtual bundle creation application allows for the creation of the virtual bundles by the user of the external computer 28.

The virtual bundle creation application 32 provides to the administrator a list of product data available for bundling. The administrator at the external computer 28 selects certain products from the list to be bundled together as a virtual bundle. The virtual bundle data 36 is stored in the database and is available for the electronic commerce type applications 38 to provide the virtual bundle to the customer.

In a preferred embodiment, the creator of the virtual bundle is associated with a group other than the electronic commerce site vendor. The customer 30 is preferably a member of this group and the product bundle is offered to the member of the group when the member goes to the electronic commerce site. One

way of implementing the virtual bundles uses custom electronic commerce sites as shown with respect to Fig. 1B.

Fig. 1B shows a server system in which custom electronic commerce stores are created. Additional details of the custom store application are given within the
5 patent application "Custom Stores," Serial Number _____, having Attorney Docket No. 001580-560/ P2513, filed on the same day as the present application and incorporated herein by reference.

In this embodiment, the virtual bundle creation application is part of an administration application 40 which can be accessed by the custom store
10 administrative computer 28'. The virtual bundle data is part of the administration data 42 in the custom store data 44 of the database 26'. In the custom store embodiment, the custom store administrator computer 28' is used to input configuration data for creating a custom store web site. This custom store data is stored in the database 26'. When a customer comes to the custom store web site,
15 a custom store web site is created using the configuration data in the database 26'. A portion of this configuration data is the virtual bundle data which allows a group member going to the custom store to select a virtual bundle of products.

In one embodiment, an instantiation application 46 in the application server 24' is used to set up the instantiation data for the custom store. This instantiation
20 data can include the store I.D., discount tier, and logo. This data is stored in an instantiation data block 48 in the custom store data 44 of the database 26'. Custom store application 50 is used to create the custom store web site using the data stored in the database 26'.

Reconciliation application 52 is used to check the virtual bundles to
25 determine whether any products in the virtual bundles have become obsolete or could be upgraded. Once the reconciliation application 52 finds such products in a bundle, an e-mail is sent, using mail server 54, to the custom store administrator computer 28' so that the custom store administrator can modify the virtual bundle. In the preferred embodiment, the database 26' includes template data 56 including

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a base price list and basic display information that is used by each custom stores and by the main web site store.

Fig. 2 shows the operation of one embodiment of the present invention. In step 60, an internal operator sets up a new custom store using an instantiation application. This results in a change in the database of the server system 58. In step 62, an administration web page URL is provided to an external administrator (e.g., 20', Fig. 1B). This URL accesses a web page used for the selection of a virtual bundle to be provided to the administrator. The URL can be loaded into a Favorites page of the browser in the external computer. In step 64, the external administrator uses the URL to go to the administrator page. In step 66, the external administrator selects the virtual bundles of the products. Additionally, certain other products can be blocked from purchase. When the administrator is finished, the changes are published which causes the virtual bundle in the database of the server system 58 to be modified.

The customer goes to a custom page to order the virtual bundle of products. In step 68, the user goes to a secure page run by an external organization or group. In step 70, the users selects and goes to a custom web store. As discussed below with respect to Fig. 8, by having a secure page run by the external organization, the server system 58 need not store a password for each member of the group. Using the secure page requires that the external organization, rather than the vendor, to maintain the member I.D.s and passwords. The server system 58 checks the "referer" field of the Hyper Text Transfer Protocol (HTTP) header. If the referer header field includes the URL of the secure page, then the custom web store is created and displayed to the user. Alternatively some portion of the URL, such as the host name, could be checked. The display indicates the virtual bundles which are selected by the administrator. In step 72, the user selects a virtual bundle of products to order. In step 74, the reconciliation application checks the custom stores for obsolete product listings in the virtual bundle. If there is an obsolete product listing, a notification e-mail is

sent to the administrator. In step 76, the external administrator modifies the virtual bundles to remove the obsolete products from the custom stores.

Fig. 3 illustrates an administration web page which allows for the selection of virtual bundles. As shown in Fig. 3, the system has a description box 110 for a system description of a virtual bundle. The system description given can describe the virtual bundle or give an indication of which subgroup the bundle is targeted to. A display order input box 112 gives the order in which the virtual bundle is displayed at the "recommended systems" page. A product information URL box 114 can be used to indicate an additional page that gives a further description of the virtual bundle. For example, a page maintained by the external administrator can describe the virtual bundle products.

A "configurable" box 116 determines whether the virtual bundle can be configured. If the virtual bundle can be configured, the customer is permitted to modify the system before purchase. If the bundle cannot be configured, the user cannot make modifications to the system before purchase.

When the reconciliation application determines that an obsolete product is used in a bundle, a "Needs Attention" indication (not shown) is displayed.

An editing button 120 is provided for the editing of virtual bundles, and a delete button 122 is provided for deleting of the virtual bundle. To build a new bundle, the administrator selects the "Add New System" button 124 which sends the administrator to a page giving a list of the different products which can be bundled into a virtual bundle. In one embodiment, the selection of the virtual bundle itself is quite similar to the selection of the computer in the normal electronic commerce site.

The "Publish" button 128 updates the database so that when a group member goes to the custom store, the new virtual bundles will be available.

Fig. 4 illustrates an example of a custom store page. This custom store page is based upon the main store pages. In a preferred embodiment, the "look and feel" of the custom store is quite similar to that of the main store. Since the

custom store uses template data from the database, updates to the main store are automatically made to the custom store.

The user can click on a "Recommended System" button which sends the customer to a "Recommended System" page, such as the page shown in Fig. 5.

5 This page illustrates the virtual bundles selected by the external administrator. Note that the title provided by the administrator is used. In one embodiment, an image can be shown for the main product of the bundle.

The user uses the "Recommended System" page to select a virtual bundle for purchase. Note that the virtual bundles described with respect to a preferred
10 embodiment are computer systems, but the virtual bundles can be any group of elements selected by an external administrator.

The use of the external administrator to select the virtual bundles allows the virtual bundles to be selected specifically for a specific group. In Fig. 5, note that one virtual bundle is a computer configured for use by music school students.
15 Another bundle is configured for law school students. The external administrator will have a good understanding of the needs of the group members.

Fig. 6A is a diagram that illustrates the operation and construction of the custom store web page using a virtual bundle. In Fig. 6A, a University of X custom store administrator 80 selects a virtual bundle. In this example, the
20 simplified virtual bundle is an iMac 400 MHZ processor with an iSub speaker system. This data is stored in the University of X custom store administration data 82 in the database. When the member of the group sends in a custom store I.D. as part of the URL for the custom store, the custom store application 84 checks the instantiation data 81 and determines that the I.D. "54" refers to the University of
25 X custom store. The University of X custom store data 82 includes a virtual bundle of the iMac 400 MHZ processor with an iSub speaker system. The custom store application 84 then determines from the products grouping list 86 the iMac and accessory discount information for Tier C, the tier for the University of X. For the discount tier C, iMacs have a 2% discount, while accessories have a 3%

discount. These discounts are applied to the base price data 90 so that the custom store application 84 can then calculate the discounted price to be provided at the custom store. In this way, whenever the base price data 90 is changed, the discounted price will also be changed for the members going to the custom store.

5 The price of the virtual bundle is not fixed but changes as the base price data 90 changes. The reconciliation application 92 checks the virtual bundle data in the custom store administration data 82. If a product is obsolete, an e-mail notification is created and sent to the administrator to modify the custom store.

10 Fig. 6B illustrates an alternate embodiment of the present invention. In this alternate embodiment, the reconciliation application 93 includes a product reconciliation module 93a and a price reconciliation module 93b. The system calculates the discount prices for the recommended systems and stores them in the customs store data 82'. Periodically, the price reconciliation module 93b
15 recalculates the discount prices of the recommended systems and stores the recalculated values in the custom store data 82'. Since the discounted prices are stored with the other custom store data, the custom store web site can quickly be displayed to users.

Fig. 7 is a diagram illustrating a data structure for one embodiment of the present invention. Each custom store has a number of associated recommended
20 systems (virtual bundles of products). The fields shown include custom store customer number, database I.D., deleted product field, description, display order, and main product I.D. The main product I.D. indicates the image shown in the recommended system page. A "Needs Attention" flag can be used to indicate an obsolete product in the bundle. Each of the recommended systems products in the
25 bundle references the products and additional options, each with specific fields.

Fig. 8 is a diagram that illustrates the operation of the security systems used with the customs stores in one embodiment. In this system, the customer goes to a home page 100 and inputs the I.D. and password which the allows the student to go to a secured student page 102. From the secured student page, the

customer clicks on to the custom store page URL and the custom store page 104 will be displayed. The custom store application only needs to check the referer header fields and need not keep track of group member I.D.s and group member passwords.

- 5 The foregoing has described the principles, preferred embodiments and modes of operation of the present invention. However, the invention should not be construed as limited to the particular embodiments discussed. Instead, the above described embodiments should be regarded as illustrative rather than restrictive, and it should be appreciated that variations may be made in the
- 10 embodiments by workers skilled in the art without departing from the scope of the present invention as defined by the following claims.

Claims

1. A system for facilitating a customer to purchase a bundle of products from a vendor comprising:

a server system adapted to allow the production of a virtual bundle of products to be sold at an electronic commerce site of a vendor, the products to be bundled being selected from a number of selectable products; and

a virtual-bundle selection computer, the virtual-bundle selection computer being operably connectable to the server system, wherein the virtual bundle selection computer is adapted to provide bundle-selection data to the server system without intervention by the vendor, the server system being adapted to use the bundle-selection data to produce the virtual bundle at the electronic commerce site.

2. The system of Claim 1 wherein the virtual bundle is available from a custom store web page for the group.

3. The system of Claim 2 wherein the database stores configuration data for the server system to construct their custom web site.

4. The system of Claim 1 wherein the virtual bundle comprises a computer system which can be purchased by the members of the group.

5. The system of Claim 1 wherein the virtual bundle data is stored in the database in a modified from the data received from the virtual-bundle selection computer.

6. The system of Claim 1 wherein the server system produces an administration web page for the person to select the virtual bundles.

7. The system of Claim 6 wherein the administration web page includes a display list of products that can be bundled.

8. The system of Claim 6 wherein the administration web page includes a publish command that causes the virtual bundle selections to be updated in the database.

9. The system of Claim 6 wherein the administration web page allows the administrator to modify a custom web page.

10. The system of Claim 1 wherein the electronic commerce site is a custom store constructed using an I.D. in the URL.

11. The system of Claim 1 wherein the group comprises an institution.

12. The system of Claim 1 wherein the electronic commerce site is dynamically produced using data from the database.

13. The system of Claim 12 wherein the price of the virtual bundle of products is dynamically calculated.

14. The system of Claim 1 further comprising reconciliation software that checks the bundle selection data in the database for obsolete products.

15. The system of Claim 1 wherein the server system comprises a web server and application server.

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16. A computer-readable medium containing a program which executes the following procedure:

as a result of virtual-bundle data sent from an virtual-bundle selection computer, storing the virtual-bundle data in a database, and

providing a virtual bundle of products to be sold at an electronic commerce site of a vendor, the products to be bundled being selected from a number of selectable products, the virtual bundle being suitable for purchase by a member of a group other than the vendor, the producing step using the virtual-bundle data stored in the database.

17. The computer-readable medium of Claim 16 wherein the virtual bundles are available at a custom store web page for the group created from data in the database.

18. The computer-readable medium of Claim 16 wherein the bundle comprises computer systems for purchase.

19. The computer-readable medium of Claim 16 wherein the data is modified before being stored in database.

20. The computer-readable medium of Claim 16 wherein an administration web page is used to allow the user at the virtual-bundle selection computer to produce the virtual bundle of products.

21. The computer-readable medium of Claim 20 wherein the display list of products at the administration web page is created is shown to indicate which products can be bundled.

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22. The computer-readable medium of Claim 16 wherein the group comprises an institution.

23. The computer-readable medium of Claim 16 wherein the electronic commerce site is dynamically created.

24. The computer-readable medium of Claim 23 wherein the price of the virtual bundle is dynamically calculated.

25. The computer-readable medium of Claim 16 further comprising of reconciliation software to check the bundle selection data in the database to determine whether obsolete products are contained in the virtual bundle.

26. A method comprising:

as a result of virtual-bundle data sent from a virtual-bundle selection computer, storing the virtual-bundle data in a database, and

providing a virtual bundle of products to be sold at an electronic commerce site of a vendor, the products to be bundled being selected from a number of selectable products, the virtual bundle being suitable for purchase by a member of a group other than the vendor, the producing step using the virtual-bundle data stored in the database.

27. The method of Claim 26 wherein the electronic commerce site is a custom store web page for group.

28. The method of Claim 26 wherein the virtual bundles comprise computer systems for purchase.

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29. The method of Claim 26 wherein the bundle selection data is stored in the database in a modified form from the data received from the virtual-bundle selection computer.
30. The method of Claim 26 wherein the user of the virtual-bundle selection computer has an administration web page which allows the user at the administration virtual-bundle selection computer to bundle products into the virtual bundle.
31. The method of Claim 30 wherein the administration web page includes a display list of products that can be bundled.
32. The method of Claim 26 wherein the group comprises an institution.
33. The method of Claim 26 wherein the electronic commerce site is dynamically produced.
34. The method of Claim 33 wherein the discounts for the products in the bundle are dynamically created at the time of the creation of the electronic commerce site.
35. The method of Claim 26 further comprising reconciling the products in the virtual bundle with the master list of available products.
36. An apparatus comprising:
means for receiving virtual-bundle data sent from an virtual-bundle selection computer and for storing the virtual-bundle data in a database, and

means for providing a virtual bundle of products to be sold at an electronic commerce site of a vendor, the products to be bundled being selected from a number of selectable products, the virtual bundle being suitable for purchase by a member of a group other than the vendor, the providing means using the virtual-bundle data stored in the database to produce the virtual bundle of products.

37. The apparatus of Claim 36 wherein the electronic commerce site comprises a custom store web page for a group.

38. The apparatus of Claim 36 wherein the bundle comprises of a computer system for purchase.

39. The apparatus of Claim 36 wherein the bundle selection data is stored in the database in a modified form from the data received from the virtual-bundle selection computer.

40. The apparatus of Claim 1 further comprising means for creating an administration web page to allow the user at the virtual-bundle selection computer to select the virtual bundles.

41. The system of Claim 40 wherein the administration web page producing means comprises a display list of products that can be bundled into virtual bundles.

42. The apparatus of Claim 36 wherein the group comprises an institution.

43. The apparatus of Claim 36 wherein the electronic commerce site is dynamically constructed.

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44. The apparatus of Claim 33 wherein the price of the virtual bundle is dynamically calculated during the creation of the virtual bundle.

45. The apparatus of Claim 36 further comprising reconciliation means which checks the bundle selection data to determine whether any obsolete products are contained in the bundle selection data.

46. The apparatus of Claim 36 wherein the apparatus comprises a server system.

47. The apparatus of Claim 46 wherein the server system comprises a web server and a application server.

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Abstract

Virtual bundles of purchasable products are created by a person external to an electronic commerce site. In a preferred embodiment, the virtual bundles are
5 associated with custom store accessible only by members of a group associated with the external administrator.

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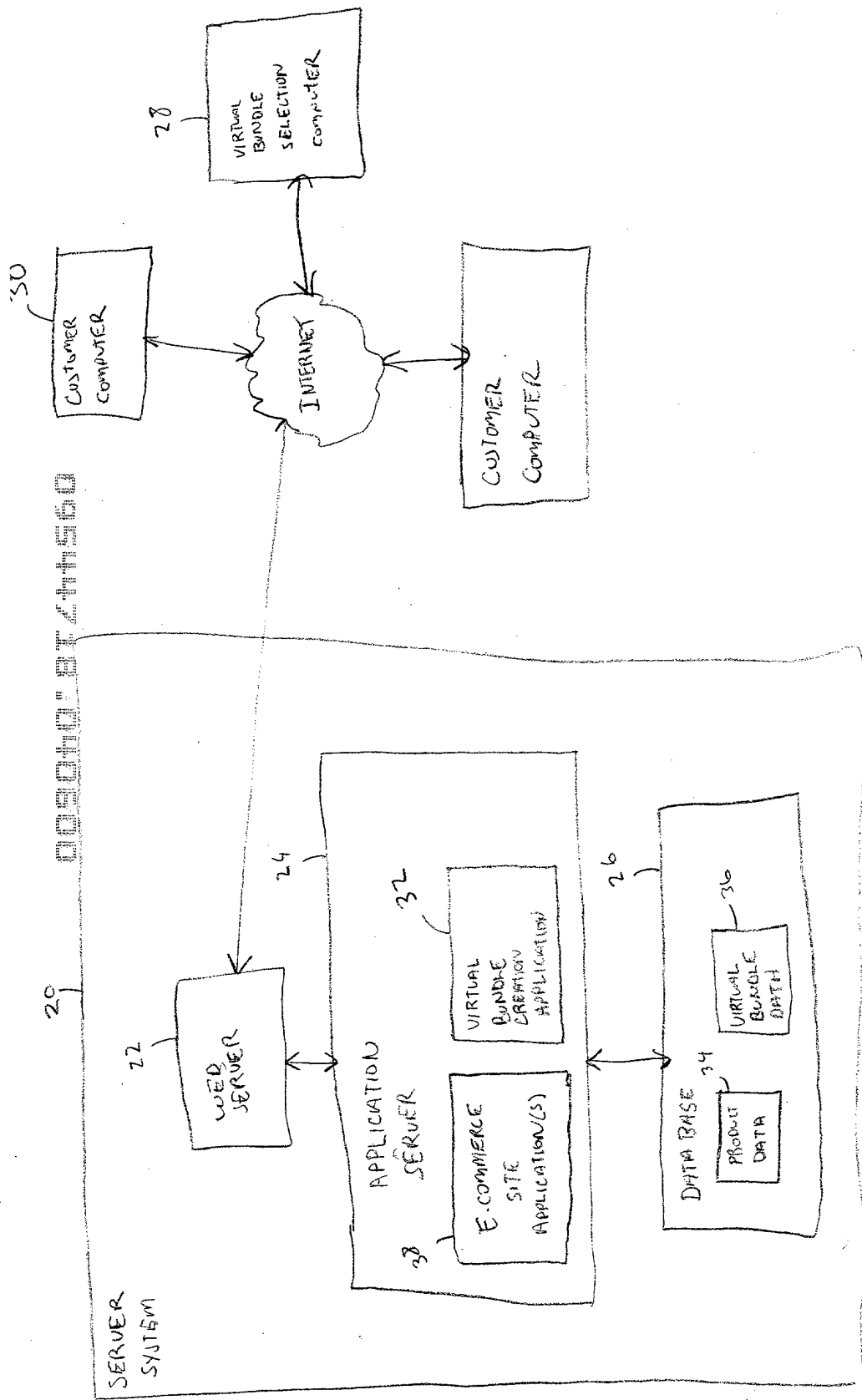


FIGURE 1A

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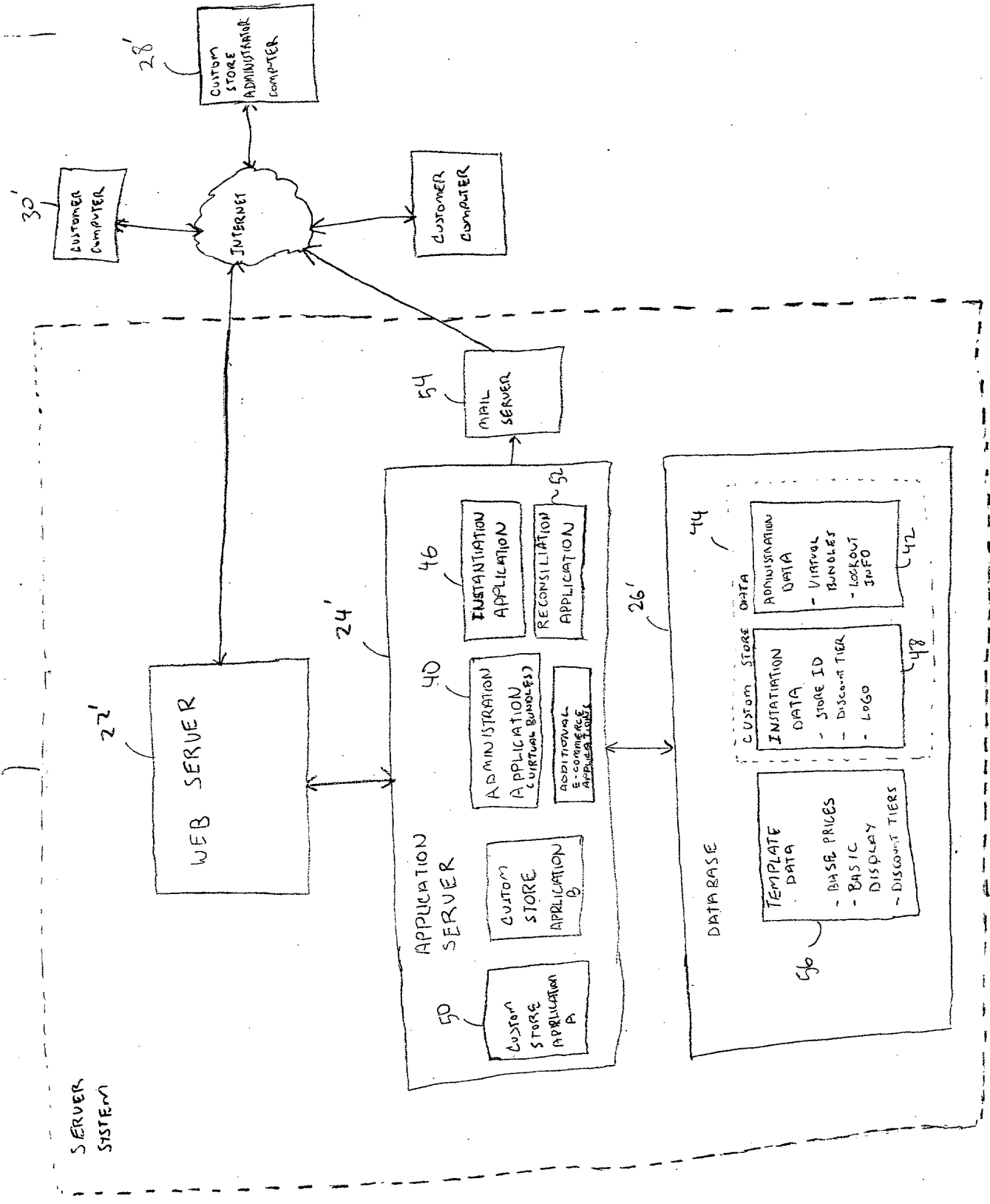


FIGURE 1B

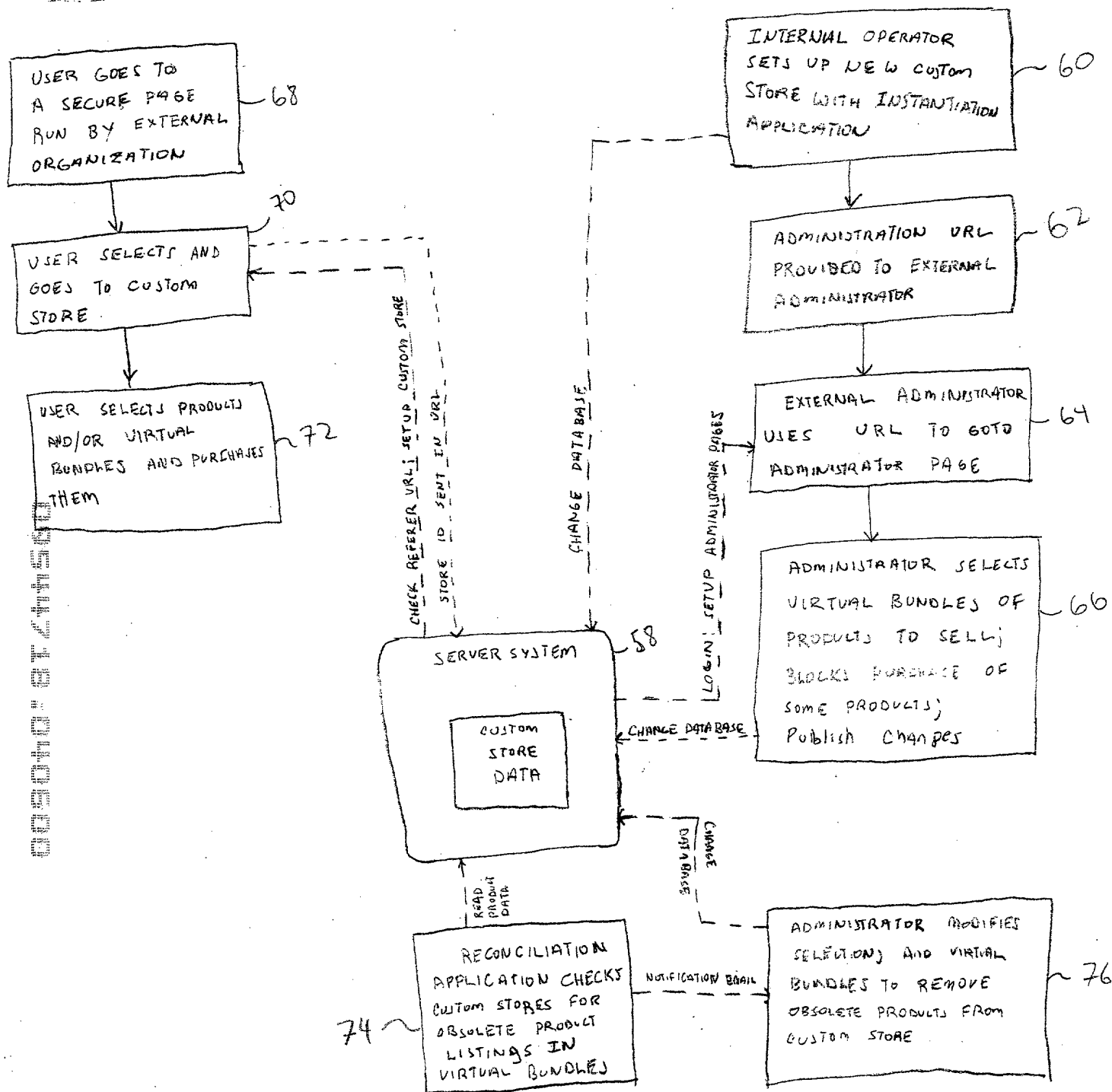


FIGURE 2

Test Version 17

AppleStore

Customized for Denver Public Schools

[Edit Store Menu](#)
[Add System](#)
[Preview Recommendations](#)
[Publish](#)
[Log Out](#)

<p>110 ~</p> <p>114 ~</p> <p>112 ~</p> <p>116 ~</p>	<p>120</p> <p>122</p>	<p>124</p> <p>128</p>	<p>120</p> <p>122</p>		
<p>Description Edit Delete</p> <p>Zip drive bundle</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="1"/></p> <p>Configurable: <input checked="" type="checkbox"/></p> <p>Price: \$2,166.00</p> <p>Power Mac G4 450MHz</p>	<p>Description Edit Delete</p> <p>Science Lab G4</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="2"/></p> <p>Configurable: <input checked="" type="checkbox"/></p> <p>Price: \$1,792.00</p> <p>Power Mac G4</p> <ul style="list-style-type: none"> • RAGE 128 Pro card - 16MB SDRAM • 10/100BASE-T Ethernet built-in • 56K internal modem with FAXstif • DVD-ROM drive with DVD-Video • 10GB Ultra ATA drive • USB Keyboard • Accessory kit • 256MB SDRAM - 1 DIMM • 400MHz PowerPC G4 - 1MB L2 cache 	<p>Description Edit Delete</p> <p>OS X Server</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="3"/></p> <p>Configurable: <input checked="" type="checkbox"/></p> <p>Price: \$5,168.00</p> <p>Macintosh Server G4 with Mac OS X Server</p> <ul style="list-style-type: none"> • 512MB SDRAM - 2 DIMMs • Accessory kit • DVD-ROM drive • 36GB Ultra2 SCSI, 2-channel card • USB Keyboard • Four-port 10/100 Ethernet PCI card • RAGE 128 Pro card - 16MB SDRAM • 500MHz PowerPC G4 - 1MB L2 cache • Ultra SCSI PCI card & cable adapter 	<p>Description Edit Delete</p> <p>Type-matched G4</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="4"/></p> <p>Configurable: <input checked="" type="checkbox"/></p> <p>Price: \$188.00</p> <p>Imega USB Zip Drive</p> <p>Imega Zip Disk 6-pack</p>	<p>Description Edit Delete</p> <p>iMac SE</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="5"/></p> <p>Configurable: <input type="checkbox"/></p> <p>Price: \$3,469.00</p> <p>PowerBook</p> <ul style="list-style-type: none"> • 500MHz PowerPC G3 with 1MB L2 cache • 18GB Ultra ATA drive • 128MB SDRAM - 1 SO DIMM • Extra AC Power Adapter • Extra Lithium-Ion Rechargeable Battery 	<p>Description Edit Delete</p> <p>G4 Server</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="6"/></p> <p>Configurable: <input checked="" type="checkbox"/></p> <p>Price: \$1,836.00</p> <p>iBook 366MHz Special Edition</p> <ul style="list-style-type: none"> • 128MB SDRAM - 1 SO DIMM • CD-ROM drive • 6GB IDE drive • Graphite
<p>Description Edit Delete</p> <p>Mike's System</p> <p>Product Info URL:</p> <p>http://www.apple.com</p> <p>Display Order <input type="text" value="7"/></p> <p>Configurable:</p> <p>Price: \$3,042.00</p> <p>Macintosh Server G4</p> <ul style="list-style-type: none"> • Accessory kit • RAGE 128 Pro card - 16MB SDRAM • 10/100BASE-T Ethernet built-in • DVD-ROM drive with DVD-Video • 18GB Ultra2 SCSI, 2-channel card • 400MHz PowerPC G4 - 1MB L2 cache • Ultra SCSI PCI card & cable adapter • 256MB SDRAM - 1 DIMM • USB Keyboard 	<p>Description Edit Delete</p> <p>Display</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="10"/></p> <p>Configurable:</p> <p>Price: \$1,836.00</p> <p>iBook 366MHz Special Edition</p> <ul style="list-style-type: none"> • Graphite • CD-ROM drive • 128MB SDRAM - 1 SO DIMM • 6GB IDE drive 	<p>Description Edit Delete</p> <p>Powerbook</p> <p>Product Info URL:</p> <p>Display Order <input type="text" value="11"/></p> <p>Configurable:</p> <p>Price: \$1,731.00</p> <p>iBook 300MHz</p> <ul style="list-style-type: none"> • AirPort Card • Tangerine • CD-ROM drive • 6GB IDE drive • 128MB SDRAM - 1 SO DIMM 			

FIGURE 3

00544718141060



FIGURE 4

AppleStore

Recommendations of Denver Public Schools

Zip drive bundle

Power Mac G4 450MHz

\$2,166.00

[Select](#)

Science Lab G4

Power Mac G4

- RAGE 128 Pro card - 16MB SDRAM
- 10/100BASE-T Ethernet built-in
- 56K internal modem with FAXstf
- DVD-ROM drive with DVD-Video
- 10GB Ultra ATA drive
- USB Keyboard
- Accessory kit
- 256MB SDRAM - 1 DIMM
- 400MHz PowerPC G4 - 1MB L2 cache

\$1,792.00

[Select](#)

OS X Server

Macintosh Server G4 with Mac OS

X Server

- 512MB SDRAM - 2 DIMMs
- Accessory kit
- DVD-ROM drive
- 36GB Ultra2 SCSI, 2-channel card
- USB Keyboard
- Four-port 10/100 Ethernet PCI card
- RAGE 128 Pro card - 16MB SDRAM
- 500MHz PowerPC G4 - 1MB L2 cache
- Ultra SCSI PCI card & cable adapter

\$5,168.00

[Select](#)

Type-matched G4

Omega USB Zip Drive
Omega Zip Disk 6-pack

\$188.00

[Select](#)

iMac SE

PowerBook

- 500MHz PowerPC G3 with 1MB L2 cache
- 18GB Ultra ATA drive
- 128MB SDRAM - 1 SO DIMM
- Extra AC Power Adapter
- Extra Lithium-ion Rechargeable Battery

\$3,469.00

[Select](#)

G4 Server

iBook 366MHz Special Edition

- 128MB SDRAM - 1 SO DIMM
- CD-ROM drive
- 6GB IDE drive
- Graphite

\$1,836.00

[Select](#)

Mike's System

Macintosh Server G4

- Accessory kit
- RAGE 128 Pro card - 16MB SDRAM
- 10/100BASE-T Ethernet built-in
- DVD-ROM drive with DVD-Video
- 18GB Ultra2 SCSI, 2-channel card
- 400MHz PowerPC G4 - 1MB L2 cache
- Ultra SCSI PCI card & cable adapter
- 256MB SDRAM - 1 DIMM
- USB Keyboard

[More Product Info](#)

\$3,042.00

[Select](#)

Display

iBook 366MHz Special Edition

- Graphite
- CD-ROM drive
- 128MB SDRAM - 1 SO DIMM
- 6GB IDE drive

\$1,836.00

[Select](#)

Powerbook

iBook 300MHz

- AirPort Card
- Tangerine
- CD-ROM drive
- 6GB IDE drive
- 128MB SDRAM - 1 SO DIMM

\$1,731.00

[Select](#)

005040" 81244560

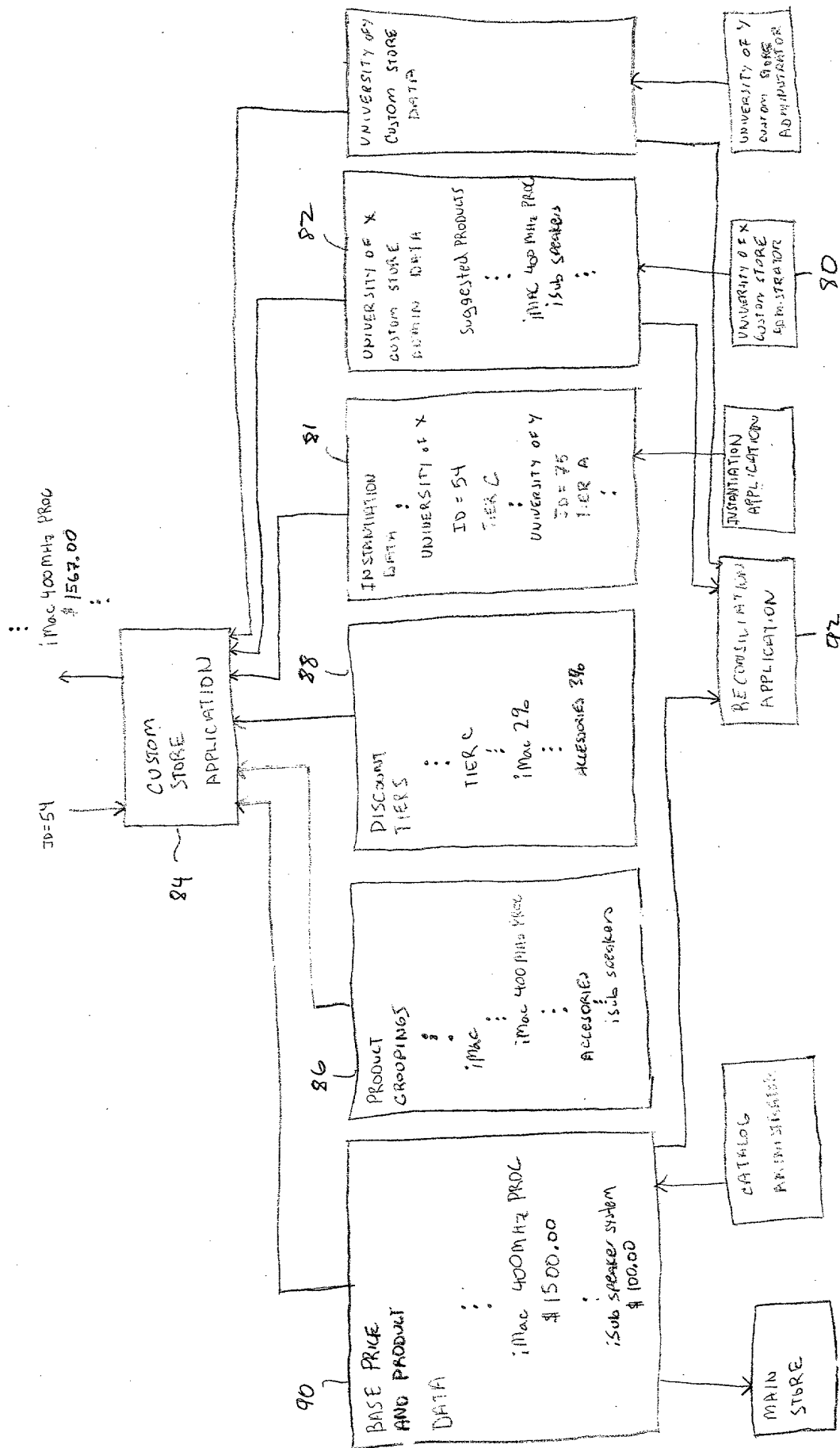


FIGURE 6A

009040 BT 244560

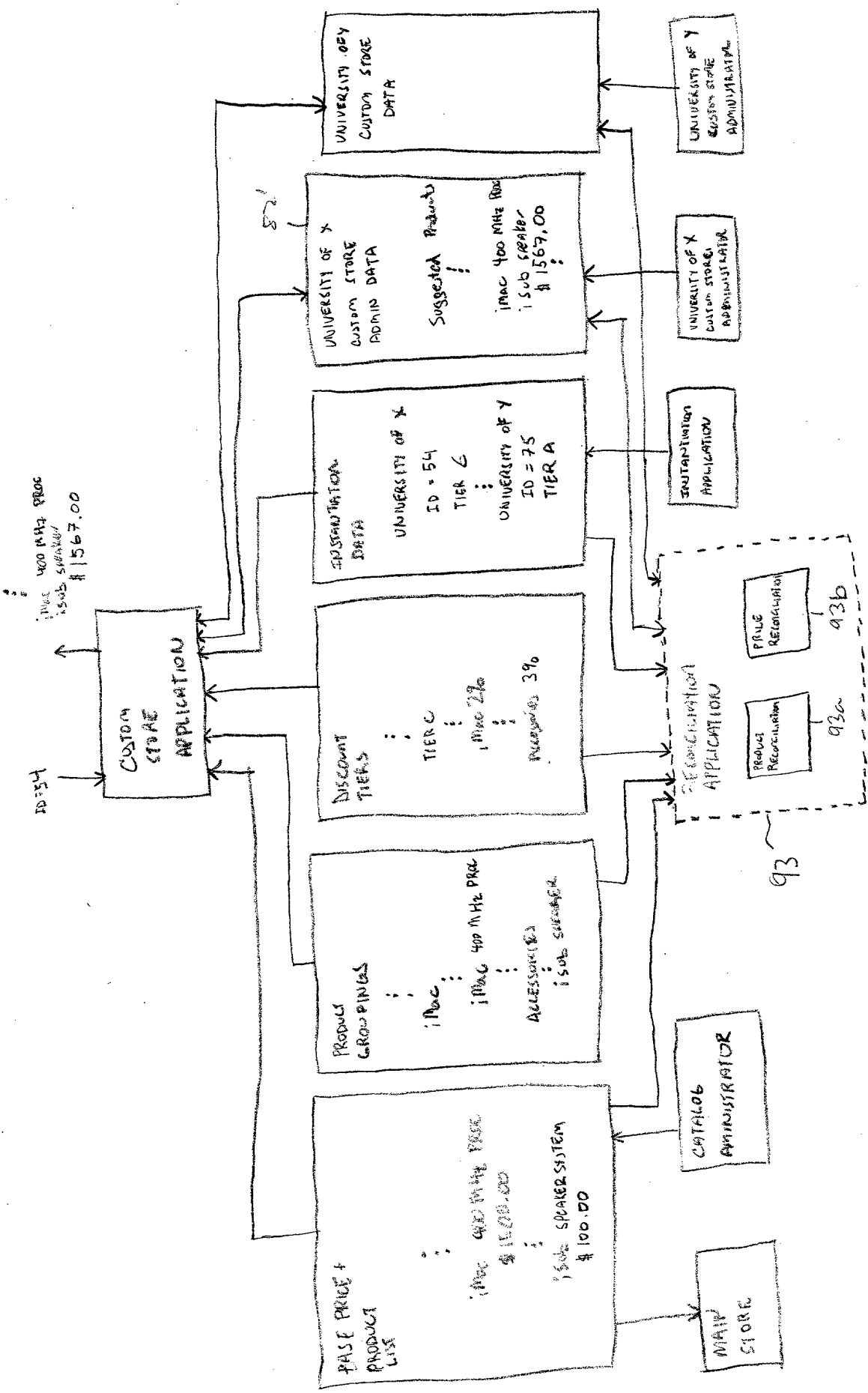


FIGURE 6B

COMBINED DECLARATION AND POWER OF ATTORNEY FOR UTILITY PATENT APPLICATION

Attorney's Docket No.

P2513/\$61

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I BELIEVE I AM THE ORIGINAL, FIRST AND SOLE INVENTOR (if only one name is listed below) OR AN ORIGINAL, FIRST AND JOINT INVENTOR (if more than one name is listed below) OF THE SUBJECT MATTER WHICH IS CLAIMED AND FOR WHICH A PATENT IS SOUGHT ON THE INVENTION ENTITLED:

VIRTUAL BUNDLES

the specification of which

(check one)



is attached hereto;



was filed on _____ as

Application No. _____

and was amended on _____;
(if applicable)

I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE;

I ACKNOWLEDGE THE DUTY TO DISCLOSE TO THE OFFICE ALL INFORMATION KNOWN TO ME TO BE MATERIAL TO PATENTABILITY AS DEFINED IN TITLE 37, CODE OF FEDERAL REGULATIONS, Sec. 1.56 (as amended effective March 16, 1992);

I do not know and do not believe the said invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to said application; that said invention was not in public use or on sale in the United States of America more than one year prior to said application; that said invention has not been patented or made the subject of an inventor's certificate issued before the date of said application in any country foreign to the United States of America on any application filed by me or my legal representatives or assigns more than twelve months prior to said application;

I hereby claim foreign priority benefits under Title 35, United States Code Sec. 119 and/or Sec. 365 of any foreign application(s) for patent or inventor's certificate as indicated below and have also identified below any foreign application for patent or inventor's certificate on this invention having a filing date before that of the application(s) on which priority is claimed;

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COMBINED DECLARATION AND POWER OF ATTORNEY			Attorney's Docket No. P2513/561																																																							
COUNTRY/INTERNATIONAL	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED																																																							
			YES NO																																																							
			YES NO																																																							
<p>I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">William L. Mathis</td> <td style="width: 10%;">17,337</td> <td style="width: 33%;">James A. LaBarre</td> <td style="width: 10%;">28,632</td> <td style="width: 33%;">William H. Benz</td> <td style="width: 10%;">25,952</td> </tr> <tr> <td>Clinton N. Mandrus</td> <td>22,124</td> <td>James W. Peterson</td> <td>26,057</td> <td>Peter K. Skiff</td> <td>31,917</td> </tr> <tr> <td>Alan E. Kopecki</td> <td>25,813</td> <td>William C. Rowland</td> <td>30,888</td> <td>Richard J. McGrath</td> <td>29,195</td> </tr> <tr> <td>Samuel C. Miller, III</td> <td>27,360</td> <td>T. Gene Dilahunty</td> <td>25,423</td> <td>Matthew L. Schneider</td> <td>32,814</td> </tr> <tr> <td>Kenneth B. Loffler</td> <td>36,075</td> <td>Patrick C. Keane</td> <td>32,858</td> <td>Gerald F. Swiss</td> <td>30,113</td> </tr> <tr> <td>Allen R. Baum</td> <td>36,086</td> <td>Bruce J. Boggs, Jr.</td> <td>32,344</td> <td>Michael J. Ure</td> <td>33,089</td> </tr> <tr> <td>Steven M. duBois</td> <td>35,023</td> <td>Susan E. Heminger</td> <td>36,449</td> <td>Charles F. Wieland III</td> <td>33,096</td> </tr> <tr> <td>Mark Asker</td> <td>32,667</td> <td>Richard Liu</td> <td>34,377</td> <td>Mark R. Knesloff</td> <td>342,766</td> </tr> <tr> <td>Helene Plutka Workman</td> <td>35,981</td> <td>Nancy R. Simon</td> <td>36,930</td> <td>Edward W. Scott</td> <td>36,000</td> </tr> </table>					William L. Mathis	17,337	James A. LaBarre	28,632	William H. Benz	25,952	Clinton N. Mandrus	22,124	James W. Peterson	26,057	Peter K. Skiff	31,917	Alan E. Kopecki	25,813	William C. Rowland	30,888	Richard J. McGrath	29,195	Samuel C. Miller, III	27,360	T. Gene Dilahunty	25,423	Matthew L. Schneider	32,814	Kenneth B. Loffler	36,075	Patrick C. Keane	32,858	Gerald F. Swiss	30,113	Allen R. Baum	36,086	Bruce J. Boggs, Jr.	32,344	Michael J. Ure	33,089	Steven M. duBois	35,023	Susan E. Heminger	36,449	Charles F. Wieland III	33,096	Mark Asker	32,667	Richard Liu	34,377	Mark R. Knesloff	342,766	Helene Plutka Workman	35,981	Nancy R. Simon	36,930	Edward W. Scott	36,000
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<p>and: <u>Joseph P. O'Malley, Reg. No. 36,226</u></p>																																																										
<p>Address all correspondence to: <u>James W. Peterson</u> <u>BURNS, DOANE, SWECKER & MATHIS, L.L.P.</u> <u>P.O. Box 1404</u> <u>Alexandria, Virginia 22313-1404</u></p>																																																										
<p>Address all telephone calls to: <u>Joseph P. O'Malley</u> at (650) 622-2300.</p>																																																										
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>																																																										
FULL NAME OF SOLE OR FIRST INVENTOR		SIGNATURE		DATE																																																						
Eduardo Cue		<i>Eduardo Cue</i>		4/5/00																																																						
RESIDENCE		CITIZENSHIP																																																								
1908 Orange Tree Lane, Mountain view, California 94040		United States of America																																																								
POST OFFICE ADDRESS																																																										
1908 Orange Tree Lane, Mountain view, California 94040																																																										
FULL NAME OF SECOND JOINT INVENTOR, IF ANY		SIGNATURE		DATE																																																						
Sharon Hilton		<i>Sharon Hilton</i>		4/5/00																																																						
RESIDENCE		CITIZENSHIP																																																								
15065 El Camino Senda, Saratoga, California 95070		United States of America																																																								
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15065 El Camino Senda, Saratoga, California 95070																																																										
FULL NAME OF THIRD JOINT INVENTOR, IF ANY		SIGNATURE		DATE																																																						
Glenn D. Rips		<i>Glenn D. Rips</i>		4/5/00																																																						
RESIDENCE		CITIZENSHIP																																																								
393 E. Arbor Avenue, Sunnyvale, California 94086		United States of America																																																								
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393 E. Arbor Avenue, Sunnyvale, California 94086																																																										

COMBINED DECLARATION AND POWER OF ATTORNEY		Attorney's Docket No. P2513/561	
FULL NAME OF FOURTH JOINT INVENTOR, IF ANY Judy D. Haldin		SIGNATURE <i>Judy D. Haldin</i>	DATE 4/5/00
RESIDENCE 20380 Stevens Creek Boulevard, Apt. #239, Cupertino, California 95014		CITIZENSHIP United States of America	
POST OFFICE ADDRESS 20380 Stevens Creek Boulevard, Apt. #239, Cupertino, California 95014			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY Susan Pfandt		SIGNATURE <i>Susan Pfandt</i>	DATE 4/5/00
RESIDENCE 2201 The Alameda #24, Santa Clara, California 95050		CITIZENSHIP United States of America	
POST OFFICE ADDRESS 2201 The Alameda #24, Santa Clara, California 95050			
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY Cathy Ridenour		SIGNATURE <i>Cathy Ridenour</i>	DATE 4-6-00
RESIDENCE 137D Union Ave Campbell, CA 95008		CITIZENSHIP United States of America	
POST OFFICE ADDRESS 137D Union Ave Campbell CA 95008			

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